

Amendments to the Drawings:

The attached sheets of drawings include substitute drawings replacing the original Figures 1-12. The substitute drawings include substitute drawings for Figures 1-6 and 12 which were objected to and Figures 7-11 which contained unintended marks on the figures.

REMARKS

Reconsideration of this application is respectfully requested in view of the foregoing amendment and the following remarks. Claims 1-35 are currently pending. Claims 22-34 are withdrawn from consideration. Claims 1-21 and 35 are rejected. Claims 1, 7, 9, 12, 17, and 19 have been amended. No new matter has been added.

Election/Restrictions

The Examiner requests that the election of claims 1-21 and 35 be affirmed. Specifically, the Examiner asserts that:

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-21 and 35, drawn to a tape application head, classified in class 156, subclass 522.

II. Claims 22-34, drawn to a method of applying tape, classified in class 156, subclass 264.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as applying webs other than tape.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Tiep Nguyen on 5/3/05 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-21 and 35. Affirmation of this election must be made by applicant in replying to this Office action. Claims 22-34 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

The undersigned representative affirms the election to prosecute the invention of Group I, claims 1-21 and 35 and acknowledges that claims 22-34 are withdrawn from further

consideration by the Examiner. The undersigned representative reserves the right to file a continuation or divisional application on the non-elected claims.

Drawings

The drawings are objected to. Specifically, the Examiner asserts that:

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because of the draftsperson objections noted on the attached PTO-948. Applicant is advised to employ the services of a competent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

According to PTO-948, the draftsperson objects to Figures 1-6 and 12 because the "Lines, numbers & letters not uniformly thick and well define, clean, durable, and black (poor line quality)." The draftsperson also circled the header "Margins" but did not indicate what figures had improper margins. On August 15, 2005, the undersigned representative and Examiner Goff discussed the objections and concluded that submitting formal drawings for Figures 1-6 and 12 should overcome the objection. The undersigned representative thanks Examiner Goff for the courtesies extended during the telephone conference. The undersigned representative is concurrently submitting substitute drawings for Figures 1-12. Please note that original Figures 6-11 had unintended marks on the figures, thus a clean set of figures are being submitted as well.

Claim Objections

Claims 7, 9, 17, and 19 are objected to because of informalities. Specifically, the Examiner asserts that:

In claims 7 and 17, line delete "side" as there is no antecedent basis for said "side" cutting assembly. In claims 9 and 19 there is no antecedent basis for "said guide roller". It appears that "said guide roller" should read - means for receiving tape from a tape supply --, and this is the interpretation given by the Examiner. It is suggested to delete "said guide roller" and insert therein - means for receiving tape from a tape supply - to overcome the objection. Appropriate correction is required.

The undersigned representative thanks the Examiner for his suggestions. Claims 7, 9, 17, and 19 have been amended as suggested by the Examiner. Therefore, the undersigned representative requests that the objection to claims 7, 9, 17, and 19 be withdrawn.

Rejection of claims 1-6, 9, 12-16, 18, and 19 under 35 USC § 102(b)

Claims 1-6, 9, 12-16, 18, and 19 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,536,342 to Reis et al. (“Reis”). Specifically, the Examiner asserts that:

Reis et al. disclose a robotic web applicator including a web application head (20 of Figure 1) capable of applying tape. Reis et al. teach the web application head comprises an idler/guide roller (44 of Figure 1) capable of receiving a tape from a tape supply, a nose (39 of Figure 1) capable of applying a tape to a substrate when the application head is moved along a substrate, and a cutting assembly (56 of Figure 1) including a blade (58 of Figure 2) movable in a direction not substantially towards a substrate the web application head is working on capable of cutting tape. Reis et al teach a hub (26 of Figure 1) capable of mounting a roll of tape and idler/guide rollers (42a and 42b of Figure 1) capable of guiding the tape from the hub to the tape application head. Reis et al.. further teach the web application head comprises a motorized web drive unit (50, 52, and 54 of Figure 1) capable of driving tape through the application head, an out feed roller (48 of Figure 1) capable of guiding a removable tape backing to a disposal system, a guide roller (46 of Figure 1) between the cutting assembly and the nose capable of guiding tape from the cutting assembly to the nose, and a controller (19 of Figure 1) capable of activating the cutting mechanism at an appropriate position (Figures 1 and 2 and Column 3, lines 15-25 and Column 4, lines 5, 38-67 and Column 5, lines 1-61 and 55-58).

Reis does not disclose, *inter alia*, “A tape application head comprising: means for receiving tape from a tape supply; means for applying said tape to a substrate when said tape application head is moved along said substrate; a braking assembly for locking said tape during cutting; and a cutting assembly for cutting said tape after a predetermined amount of said tape has been applied to said substrate, said cutting assembly comprising a blade movable through said tape in a direction not substantially towards said substrate” as recited in amended claim 1 of the present application. (Emphasis added). As recited in the present application, “Referring to Figure 1, when it is desired to cut the tape, a tape braking assembly (21) presses the tape firmly into contact with a portion of the applicator head. This locks the tape so that as the tape head pulls away from the body part, the tape does not unwind any further from the roll.” (See paragraph [0042] of the present application). Reis does not disclose a braking assembly. In order to maintain an anticipatory rejection under 35 U.S.C. §102, a reference must teach each and

every element of the claim. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference). Since independent claim 12 recites “a brake assembly for locking said tape during cutting,” claim 12 is patentable over the cited art for the same reasons.

Accordingly, it is respectfully submitted that independent claims 1 and 12, and their dependent claims 2-11, 13-21, and 35, respectively, are allowable over the cited reference. Hence, for at least these reasons, the undersigned representative respectfully requests that the rejection of claims 1-6, 9, 12-16, 18, and 19 under 35 U.S.C. §102(b) be withdrawn.

Rejection of claims 7, 8, and 17 under 35 USC § 103(a)

Claims 7, 8, and 17 stand rejected under 35 USC § 103(a) as being unpatentable over Reis in view of U.S. Patent 5,714,034 to Goodhue. Specifically, the Examiner asserts that:

Reis et al. is described above in full detail. Reis et al. are silent as to the particular means for indication to the controller the cutting mechanism should be activated. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include on the web application head taught by Reis et al. feed rate sensors for working with the controller to determine when the cutting mechanism should be activated as was well known in the art as shown for example by Goodhue wherein only the expected results would be achieved.

Goodhue is exemplary in the art of the well known use of a controller and feed rate sensor to activate a cutting mechanism (Column 6, lines 3 1-37).

Since claims 7, 8, and 17 are dependent on allowable claims 1 and 12, respectively, and since Goodhue does not cure the deficiencies of these claims, dependent claims 7, 8 and 17 are allowable as well. Therefore, the undersigned representative will not address the arguments with respect to these claims and reserves the right to address these arguments at a later time.

For at least these reasons, dependent claims 7, 8, and 17 are patentable over the cited art. Accordingly, it is respectfully requested that the rejection of claims 7, 8, and 17 under 35 U.S.C. §103(a) be reconsidered and withdrawn.

Rejection of claims 10, 11, 20, and 21 under 35 U.S.C. 103(a)

Claims 10, 11, 20, and 21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Reis in view of either one of U.S. Patent 4,980,011 to Gruber et al. (“Gruber”) or U.S. Patent 5,709,162 to Pagett et al. (“Pagett”). Specifically, the Examiner asserts that:

Reis et al. is described above in full detail. Reis et al.. are silent as to using a compliance cylinder to apply pressure to the nose, it being noted Reis et al. teach any means may be used (Column 4, lines 40-43). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the means to apply pressure to the nose taught by Reis et al. a compliance cylinder, e.g. a compliance air cylinder and brake assembly, as was well known in the art as show for example by either one of Gruber et al. or Pagett et al. for accurately pressing the nose.

Gruber et al. and Pagett et al. are exemplary in the art of a compliance cylinder, e.g. including a compliance air cylinder and brake assembly, for accurately controlling the distance of a pressing member, e.g. tape application head nose (Column 3, lines 5-7 of Gruber et al. and Column 6, lines 35-39 of Pagett et al.).

As recited above, Reis does not disclose a braking assembly. The Examiner asserts that Gruber and Pagett teach or suggest a braking assembly. Gruber uses a brake to stop the advancement of tape in order to “break” the tape. (See Gruber, Col. 2, lines 62-66 and claim 1). Breaking tape and cutting tape are very different in that breaking the tape causes the tape to stretch and can cause the tape to break unevenly. Using “a cutting assembly for cutting said tape after a predetermined amount of said tape has been applied to said substrate, said cutting assembly comprising a blade moveable through said tape ...” as recited in claim 1 of the present application allows the knife to cut the tape evenly and avoids stretching the tape, thus ensuring that the proper amount of tape is applied to the substrate. By breaking the tape and causing the tape to stretch, Gruber does not apply a “predetermined amount of said tape” as recited in claim 1 of the present application. By not applying the proper amount of tape, Gruber defeats one of the problems that the present application addresses. Similarly, Pagett does not cure the deficiencies of Reis. Pagett uses an air cylinder equipped with a brake for loading a waist band onto a shirt during sewing. Pagett is not applying “a braking assembly for locking said tape during cutting” as recited in claim 1 of the present application.

Since claims 10, 11, 20, and 21 are dependent on allowable claims 1 and 12, respectively, and since neither Gruber and/or Pagett cure the deficiencies of these claims, dependent claims 10, 11, 20, and 21 are allowable as well.

For at least these reasons, dependent claims 10, 11, 20, and 21 are patentable over the cited art. Accordingly, it is respectfully requested that the rejection of claims 10, 11, 20, and 21 under 35 U.S.C. §103(a) be reconsidered and withdrawn.

Rejection of claim 35 under 35 U.S.C. 103(a)

Claim 35 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Reis in view of Gruber. Specifically, the Examiner asserts that:

Reis et al. is described above in full detail. Reis et al. are silent as to using a vacuum disposal system. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the disposal system taught by Reis et al. a vacuum system to avoid having to spool removable tape backing as was well known in the art and shown for example by Grubber et al.

Grubber et al. is exemplary in the art of a tape applicator head including a vacuum disposal system cooperating with a tape drive unit to dispose of a removable tape backing (Column 3, lines 50-53).

Since claim 35 is dependent on allowable claim 1 and since Gruber does not cure the deficiencies of claim 1, dependent claim 35 is allowable as well. Therefore, the undersigned representative will not address the arguments with respect to these claims and reserves the right to address these arguments at a later time.

For at least these reasons, dependent claim 35 is patentable over the cited art. Accordingly, it is respectfully requested that the rejection of claim 35 under 35 U.S.C. §103(a) be reconsidered and withdrawn.

CONCLUSION

The foregoing is submitted as a full and complete Response to the non-final Office Action mailed May 19, 2005, and early and favorable consideration of the claims is requested. If the Examiner believes any informalities remain in the application which may be corrected by Examiner's Amendment, or if there are any other issues which may be resolved by telephone interview, a telephone call to the undersigned attorney at (202)508-5843 is respectfully solicited.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 50-1458, and please credit any excess fees to such deposit account.

Respectfully submitted,

Dated: August 23, 2005



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